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May 27, 2001

Donna Wieting, Chief; Marine Mammal Conservation Division; Office of Protected Resources; National Marine Fisheries Service 1315 East-West Highway; Silver Spring, MD 20910-3226.

Dear Ms. Wieting, and all NMFS personnel concerned:

I have read the Navy's FEIS on SURTASS LFA sonar and am extremely concerned about the deleterious effects of the LFAS system on all marine life, particularly cetaceans. This letter will focus mainly on just a few of the serious problems in the FEIS document, the proposed rule, and information from other papers I have read by marine mammologists, and finally, from my own personal experience with cetaceans.

My greatest concern is for Hawaii's endangered North Pacific Humpback whales. As you probably know, two thirds of this species spends half the year in Hawaiian waters mating and giving birth. These waters are a nursery for a very revered, respected endangered cetacean. The 'Hawaiian Islands Humpback Whale National Marine Sanctuary' was established to protect and honor these magnificant mammals. In addition, these whales travel thousands of miles through the ocean twice a year, and deserve safe passage and respect wherever they travel.

I have 23 years of direct scientific and personal experience observing the behaviors of numerous ocean mammalian species. I have spent countless hours in and on the ocean surrounding Kaua'i and Hawai'i observing, documenting and interacting with whales, several species of dolphins, turtles and Hawaiian monk seals. I have also worked with both captive and wild Atlantic bottlenose and Pacific white-sided dolphins with Dr. Ken Norris and Dr. Randy Wells at UCSC's Long Marine Laboratory, Mote Marine Laboratory and "in the field" on the waters in Sarasota, Florida.

The Navy says they will not deploy LFAS if whales are seen in the area. In light of my experience and knowledge, I can **guarantee** that there is NO POSSIBLE way the Navy, or anyone else, can determine if there are no marine mammals in the testing area. Furthermore, the lethal impact of this sonar, especially at airspace resonance frequency, can affect mammals who are 20-100 kilometers away from the deploying ship.

The Navy conducted the LFAS tests at levels about 5,000 times less intensity and 70 times less pressure than planned deployment levels. Scientists conducting the tests have said, "It will be difficult to extrapolate from these results to predict responses at higher exposure levels." Instead of heeding this cautionary statement from their own scientists, the Navy concluded that it is safe to deploy LFAS at levels much higher than tested. THIS IS NOT VALID SCIENCE! There are other problems in the FEIS.

The LFA scientific research program (SRP) does not adequetly cover the potential effects of the system. The system was not used at the appropriate level and two of the projects were poorly designed (see O- 021) and carried out (see O-054). The projects lasted only a few weeks, and did not examine what the top scientists in the field consider to be the most likely species to be affected by LFAS: the sperm and beaked whales. Therefore the LFA-SRP has very little to tell us about the potential effects of the LFA system on marine life. Yet physical evidence of the deadly effects of LFAS exists with the two significant mass strandings and deaths (Greece in 1995 and the Bahamas in 2000) which occurred just after sonar deployment. Evidence indicates that not only is airspace resonance with LFAS and other sonar frequencies a problem for beaked whales, but also the sound pressure level of 180 dB received level is not safe, and is probably not safe for other cetaceans as well (two minke whales and a dolphin also stranded in the Bahamas). The whales in the Bahamas stranding in 2000 and the Mediterranean stranding in 1995 were exposed to high intensity sonars (LFAS in the Mediterranean and the Navy's standard mid-range sonar in the Bahamas) at received levels well below 180 dB, the sound level presumed to be "safe" by the Navy. In fact, the whales in the Mediterranean stranding were exposed to a received level of 150 dB of LFAS according to calculations by the Navy NATO, (Annex G).

As a result of an investigation of the stranding in the Mediterranean in 1995, correlated with NATO Low Frequency Active Sonar (LFAS) tests, NATO and the U.S. Navy have known the resonance frequency of airspaces in Cuvier's beaked whales since 1998, (page H2, SACLANTCEN M-133). The resonance frequency of these whales' airspaces almost precisely match the frequencies of LFAS and powerful mid-range sonars. Before the Bahamas stranding researchers sighted beaked whales a dozen or more times a year in the area. In the year after the Bahamas stranding they saw beaked whales only once and they were two previously unidentified whales who were probably new arrivals to the area. Researcher Ken Balcomb believes it is probable that all Cuvier's beaked whales in the region were killed by the naval sonar.

In additional recent research, a Smithsonian analysis determined that of the seven known mixed-species mass strandings involving beaked whales, all seven occurred over the last 30 years while naval maneuvers were conducted nearby.

Even at the lower test levels a number of negative effects were documented including inshore gray whales changing their migration route, blue and fin whales decreasing their vocalizations by 50 and 30% respectively, humpback whales leaving the test area, humpback whales changing the length of their song and three abandoned cetacean calves appearing in the test area in Hawaii during and right after testing. According to the precautionary principle, these observations should have been heeded as warning signs. Instead they were ignored or dismissed as biologically insignificant.

LFAS was tested at low levels on only four species of whales for about one month each. Consequently, we know virtually nothing about what impact the higher, deployment level sonar will have on marine life and humans over the long term.

The U.S. Navy is refusing to acknowledge the evidence that this technology is dangerous. After \$350 million spent, the Navy is being disingenuous in their conclusions. The EIS is more a propaganda document designed to justify all the expenditures than an objective assessment of the actual science. The Navy obviously has more than a casual interest in deployment, and this is precisely why the National Environmental Policy Act prohibits irretrievable and irreversible commitments of resources prior to the preparation of an EIS.

Furthermore, the US Marine Mammal Commission's report to Congress states: "If the LFA system were made available for worldwide use as proposed, all species and populations of marine mammals including those listed as endangered and threatened under the Endangered Species Act could possibly be affected." The report continues to explain that the possible effects on marine mammals could include: death from trauma, hearing loss, disruption of feeding and breeding, abandonment of traditional habitats, stress which makes the animals more vulnerable to disease and predation, changes in distribution and abundance of important their prey species, and subsequent decreases in marine mammal survival and productivity.

Based on all of this information, I find it unconscionable that the Navy is even considering the deployment of this deadly technology. I implore you, NMFS as the stewards of the Nation's marine mammals, to listen to the truth of your soul. No amount of money can undo the effects of destroying species and their habitat, nor will it retrench retribution for the results of ones actions in this life.

And finally, I'd like to counter the Navy's justification for deploying LFAS for purposes of national security. On June 27, 2000 Rear Admirals Fages and Davis spoke before a subcommitte of the House Armed Services Committee saying the Navy now has two new passive listening systems (SURTASS Twin Line and Advanced Deployable System) that can detect quiet submarines at considerable distances where previously they were thought to be undetectable.

These passive systems will not harm marine life and appear to be a safe alternative to LFAS. The use of safe, passive listening systems was not addressed in the EIS. By using the safe, passive detection systems and shutting down LFAS, the Navy can fulfill its mission for national security and be stewards of the seas.

I ask you to consider all the marine species who do not have the ability to speak for their lives and their future on this planet. DENY the Navy's application for a permit to take marine mammals.

Mahalo for your wise and conscientious decision on this extremely important issue.

Respectfully,

Nina Morris